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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/421,417	10/19/1999	RUSTIN W. ALLRED	TI-29327	4125
23494	7590	06/30/2005	EXAMINER	
TEXAS INSTRUMENTS INCORPORATED P O BOX 655474, M/S 3999 DALLAS, TX 75265			GRIER, LAURA A	
			ART UNIT	PAPER NUMBER
			2644	

DATE MAILED: 06/30/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/421,417

Applicant(s)

ALLRED, RUSTIN W.

Examiner

Laura A. Grier

Art Unit

2644

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 24 January 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-24, 31 and 32 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 3 and 14-15 and 31-32 is/are rejected.
- 7) ☒ Claim(s) 2, 4-13 and 16-24 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

**DETAILED ACTION**

1. The indicated allowability of claims 31 and 32 is withdrawn.

***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 31-32 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 31, line 2, recites, "receiving an input" and lines 10-11, recite, "further comprising receiving an audio input...". As recited, the claim language provides indefiniteness as whether or not more than one audio input signal is being claimed.

Regarding claim 32, line 2, recites, "receiving an input" and lines 10-11, recite, "further comprising receiving an audio input...". As recited, the claim language provides indefiniteness as whether or not more than one audio input signal is being claimed.

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Silfvast et al., U. S. Patent No. 5524060 in view of Goff, U. S. Patent No. 6317117.

Regarding claim 1 and 14, Silfvast et al. (herein, Silfvast) discloses a digital audio gain control system with an operator interface. Silfvast's disclosure comprises level detector (133) receiving an audio input signal, which reads on a level sensor, a RAM look-up table, which reads on a level mapper, and an analog filter (147) receives the gain signal and alters the audio accordingly as is coupled to VCA to provided a controlled loudness audio output signal (col. 12, lines 54-59). However, Silfvast fails to disclose a compensation filter, therein as claimed, in respect to the center frequency and bandwidth setting.

Regarding the compensation filter, Goff discloses a user interface for the control of an audio filter processor. Goff disclosure comprises parameters that used controlled in a filter for controlling the signal. The parameters are the center frequency, the bandwidth and the amplitude (gain) – col. 1, lines 11-41), which constitutes as a compensation filter.

Thus, it would have been obvious to one of the ordinary skill in the art at the time the invention was made to modify the invention of Silfvast implement a filter (compensation filter) with specific parameters such as a center frequency, and bandwidth in respect to the gain for the purpose of optimally controlling the loudness level of the audio signal.

### ***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are

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such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 3 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Silfvast and Goff.

Regarding claim 3 and 15, Silfvast and Goff discloses everything claimed as applied above (see claim 1 and 14). Silfvast and Goff (Goff) discloses that one or more discloses filters including a bandpass filter may used in the implementation of the invention (col. 8, lines 49-53). Thus, it would have obvious to use a bandpass filter with the control parameters of center frequency and bandwidth for efficiently controlling the level of the audio signal.

#### ***Allowable Subject Matter***

8. Claims 2, 4-13 and 16-24 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

#### ***Response to Arguments***

9. Applicant's arguments with respect to claims 1-24 and 31-32 have been considered but are moot in view of the new ground(s) of rejection.

The applicant provided remarks in respect the to amended changes to overcome the 112 indefiniteness rejection and provide arguments against the art rejection failing the disclose the claimed invention specifically the compensation filter. The art rejection of Kramer and Stockham has been removed. New references of prior art have been provided to support the

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claimed limitation of a level sensor, level mapper and a filter, which reads on a compensation filter.

*Conclusion*

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Laura A. Grier whose telephone number is (571) 272-7518. The examiner can normally be reached on Monday - Friday, 7:30 am - 4:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vivian Chin can be reached on (571) 272-7848. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Laura A. Grier  
June 24, 2005